
Initial Meridian 1 installation

Before Meridian 1 equipment is delivered to the installation site, you must consider

- fire protection and safety requirements
- equipment room requirements
- grounding and power requirements
- cable requirements

Specifications for these requirements and for developing the equipment room floor plan are provided in *Meridian 1 installation planning* (553-3001-120).

For proper installation, perform the steps in this procedure in the order given. If you go to a subsection to perform a step, return to the next step in this procedure when the tasks in the subsection are completed. For example, when you complete Step 3 “position and level equipment,” return to Step 4 in this procedure. See [Table 1](#) for a list of tasks in subsections.

Whenever possible, install external power equipment before the system installation. If reserve power equipment is used, install it according to the manufacturer’s instructions.

To install telephones and attendant consoles, see *Telephone and attendant console installation* (553-3001-215).

System installation is to be performed by qualified personnel only.

System installation procedures

- 1 Prepare equipment for installation; go to “Preparing equipment for installation” on page 15.
- 2 Place the fourth module on a column (if required); go to “Placing the fourth module on a column” on page 23.
- 3 Position and level equipment; go to “Positioning and leveling equipment” on page 29.

Note: If earthquake bracing is required, go to “Installing earthquake bracing” on page 341 to install column and floor bracing and to position and level equipment. When those procedures are complete, return to Step 4 or Step 5 (as applicable) in this procedure.

- 4 Install overhead cable tray kits (if required); go to “Installing overhead cable tray kits” on page 35.
- 5 Install power supplies in all modules:
 - Make sure the system is disconnected from any power source.
 - Set switches and breakers on all module power supplies or module power distribution units (MPDUs) to OFF.
 - Insert each power supply into the appropriate card cage and hook the locking devices.

Note: In option 21E, a battery pack on the NTND02 Misc/SDI/Peripheral Signaling (MSPS) Card can provide up to 60 minutes of backup for CPU memory during power failures. To enable this function, pull the MSPS Card out, plug the connector from the battery pack assembly into the connector on the card (make sure the connector key is centered on J2), and reseal the card.

- 6 Install the disk drive unit in a CPU Module.

Note: In options 61C, 81, and 81C, there are two disk drive units. Install a disk drive unit in each Core/Network or Core Module.

- 7 Install power equipment and ground wiring:
 - For AC-powered systems, go to “Installing AC power” on page 37.
 - For DC-powered systems, go to “Installing DC power” on page 47.

- 8 Plan and designate the main distribution frame (MDF); go to “Planning and designating the Modular Distribution Frame (MDF)” on page 69.
- 9 Install power fail transfer units (PFTUs) (if required); go to “Installing PFTUs” on page 85.
- 10 Configure the system monitor; go to “Configuring the system monitor” on page 93.
- 11 Connect a system terminal (or modem); go to “Connecting a system terminal (or modem)” on page 107.

Note: The NT7D15 System Monitor used in option 21A does not connect to an SDI port or to the system terminal.

- 12 Install cabling:

- To cable common equipment, go to “Cabling common equipment” on page 135.

Note: This procedure does not apply to single CPU systems (options 21A, 21, 21E, 51, and 51C).

- To cable network loops, go to “Cabling network loops” on page 191.

Note: In options 21A, 21, and 21E, IPE slots 0–9 in the NT8D11 CE/PE Module are served by the NT8D18 Network/Digitone Receiver (DTR) Card. There is no cabling between the Network/DTR card and the IPE Cards.

- To cable PE/IPE Modules to the MDF and to connect lines and trunks, go to “Cabling lines and trunks” on page 217.

- 13 Power up the system and load the system software; go to “Powering up the system and initial loading” on page 315. However, if you are upgrading your system, do not install new software, but return to the upgrade procedures in *Upgrade system installation to release 22* (553-3001-258).

- 14 Perform acceptance tests; go to “Performing acceptance tests” on page 331.

Note: To test circuit cards, see “Acceptance tests” in *Circuit card installation and testing* (553-3001-211). To test telephones and attendant consoles, see *Telephone and attendant console installation* (553-3001-215).

15 Replace all covers and grills on the front and rear of the system.

Table 1
Initial system installation—list of tasks in subsections

Task	Go to
Prepare equipment for installation	page 15
Place the fourth module on a column	page 23
Position and level equipment	page 29
Install overhead cable tray kits	page 35
Install power supplies in all modules*	—
Install the disk drive unit(s)*	—
Install power equipment and ground wiring	
AC power	page 37
DC power	page 47
Plan and designate the MDF	page 69
Install PFTUs	page 85
Configure the system monitor	page 93
Connect a system terminal (or modem)	page 107
Cable common equipment	page 135
Cable network loops	page 191
Cable lines and trunks	page 217
Power up the system and load system software	page 315
Perform acceptance tests	page 331
* See “System installation procedures” on page 12 and 2-3 for details on tasks that are not described in subsections.	